Nat. History vol. 9.

A DISSERTATION ON *Breeding of Horſes,* UPON Philoſophical and Experimental Principles;

BEING

An attempt to promote thereby an Improvement IN THE PRESENT MANNER OF

BREEDING RACERS, And HORSES in general.

Alſo ſome material Obſervations upon thoſe Sorts of

FOREIGN HORSES,

Which are adapted to Racing;

PARTICULARLY

Thoſe of the Kingdom of *Yemine*, in *Arabia Fælix*, or *South Arabia*. Alſo thoſe of *Arabia Petrea*, or *North Arabia*. And likewiſe thoſe of *Barbary*, *Turky*, and *Ethiopia*.

In a LETTER to a FRIEND.

By RICHARD WALL.

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Printed for G. WOODFALL, *Charing Croſs*; W. COOKE, in *Queen Street*, *May Fair*; R. HEBER, in *Long Acre*; and J. WILKIE, in *St. Paul's Church Yard*.

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PREFACE.

IT may not be impro per to inform the reader that the following epiſtle was originally written to oblige a friend, but without any intention of being publiſhed. The author therefore deſires him to excuſe his not having been ſo particular in digeſting it as he ought, and conſequently would have been, if he had then been in expectation of its ever appearing before the publick. The reader therefore will, he hopes, be candid enough to conſider it in the proper light; which is---as a few ſentiments on the principles of nature, in regard to breeding of horſes, freely given to a friend.

It was written in the year 1758, being a ſecond letter on the ſubject of horſes,--- The firſt may probably never be publiſhed, tho' the author was deſired by ſeveral friends, at that time, to publiſh both of them; but his not then having time to do it, they have till now remained dormant. This ſecond letter now ventures to make its appearance in the world, tho' not without an expectation of undergoing the ſeve-

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rity of criticiſm! nor without hopes of meeting with many favourable and candid judges; and eſpecially as the author is induced to take this ſtep from a motive, which he flatters himſelf will be deemed a laudable one.

In one reſpect---it is with a view to give thoſe who are concerned in breeding of horſes, and have not taken the trouble to think about the nature of it, this ſketch of the fundamental principles, whereby they may proceed for the future, upon ſuch methods that will anſwer more to their pleaſure and advantage than has hitherto done in their uſual practice. In another reſpect ——he knowing that improvements on this ſubject have always been much wanted, and as thoſe who may have great judgment therein have hitherto been ſilent upon it, he imagines, his making this firſt attempt may probably be an inducement to one or other of ſuperior abilities, to favour the publick with their ſentiments on this very important ſubject. If he is ſo happy to ſucceed in theſe expectations, it will be a great pleaſure.

Dissertation,

&c. &c. &c.

SIR,

ACcording to your desire, I have taken the first opportunity of giving you my sentiments, which I fear are very defective,

upon the Breeding of Horſes; and will be more particular to that ſort called high-bred, or racers, than to horſes in general.

You are no ſtranger to the frequent complaints made by gentlemen that are curious in their choice of horſes, of the great difficulty they find in procuring good and beautiful horſes of any ſort whatever, whether racers, hunters, coachers, or even roadſters; notwithſtanding the great number bred annually in this kingdom! Is not this fault owing to the too frequent bad method

of

of breeding? A bad method, I ſay, becauſe many, nay moſt I have ever converſed with on this ſubject, aſſert that no judgment is required, and that the whole dependance is upon chance! I muſt beg their pardon for differing with them in opinion upon this matter; though I own with them, that there is ſome uncertainty attending the beſt method that ever was, or ever will be practiſed. But I muſt beg leave to ſay, and a little poſitvely too, that breeding of horſes ought not to be left to chance only, but to be weighed maturely, and with great care and caution; to be founded

upon good and ſound reaſoning, and this alſo to be joined to the beſt obſervations that can poſſibly be made! I am pretty certain, that if the generality of breeders (I do not mean all) would give themſelves ſome trouble in diſcuſſing and reaſoning upon this ſubject, many of them would alter their preſent method, becauſe there is a probability of their having a great advantage in ſo doing: beſides, the conſequence would in a few years plainly appear, by this kingdom being ſtocked with a much greater plenty of fine and uſeful horſes than it now affords.

I have obſerved to you, Sir, that I am of opinion there is not any infallible method of breeding to be pointed out, by me, at leaſt; therefore I propoſe to lay before you in this epiſtle, ſuch obſervations as my ſmall experience has given me an opportunity of making; and to which I will beg leave to add ſome natural enquiries, and alſo ſome conjectures, in order to diſcover a method that hath, or reaſonably appears to have, the greateſt probability of ſucceſs.

Was an account to be taken of all the horſes, &c. of the racing

ſort

ſort that are bred in one year in this kingdom, I imagine we ſhould find the number would not be leſs than three thouſand: I may indeed gueſs a little wide, but in this reſpect it is not very material. Now if we look a few years back into the racing liſts, and make ſome obſervations thereon, we ſhall find there is not in one year's produce, upon the average, more than ſix firſt-rate horſes! Here you probably will be deſirous of knowing what I mean by a firſt-rater? and how far that title ought to extend? To obviate which, I will ſuppoſe the Beconcourſe at *Newmarket* to be a proper one,

one, to have a fair trial between two, or any other number of horſes: again, will further ſuppoſe that all the racing breed of one year's produce were trained on purpoſe to have their trial there, whereby to know their form or comparative goodneſs; this would be diſcovered at the cloſe of the heat, when each one (according to his appearance) will have acquired the denomination of ſome claſs; either firſt, ſecond, or third rate, or good for nothing. Hence ſuppoſe three lines, parallel to the end, drawn acroſs the courſe; one of them twenty yards, another eighty, and another one hundred and

fifty

fifty yards from the end.—But before we proceed any farther, it may not be improper to name a horſe or two by way of fixing a ſtandard for the firſt rate horſes; and for which purpoſe I will take the liberty of naming Jaſon and Spectator, becauſe they are medium firſt-raters, have lately been in training, and always been ſteady racers and appeared about the ſame mark in public at one time as at another; therefore they are moſt proper to remark for this purpoſe. —— Suppoſe then in this trial, that at the cloſe of the heat there were ſix that had croſſed the firſt line when the firſt horſe or (ſuppoſe

Jaſon

Jaſon or Spectator) was at the end? theſe ſix we will call firſt-raters. At the ſame moment we will ſuppoſe that there may be forty between the firſt and ſecond line; theſe may be called ſecond-raters; and between the ſecond and third lines there may perhaps be two hundred; theſe we will call third-rates; and as to the remainder (ſome of which will be very probably beat half a mile) I think they may be deemed of little or no value as to racers.

I know you'll laugh at my extravagance in training and trying the whole produce of one year at

once; but I can assure you it is comparatively so practised by most noblemen and gentlemen who keep racers. My meaning also hereby is, to attempt forming a nearer judgment of the real value of young and untried colts, &c. than is commonly set upon them. This leads me farther to observe, that upon the supposition of 3000 being bred in one year, there probably may be 1000 thought by their owners not worth training; and there may be 500 mares thrown into the studs for breeding; therefore 1500 are probably the most ever put in training in one year; which number according to

our

our calculation are reduced by trials, viz. to ſix good ones, forty middling ones, and two hundred bad ones: therefore ten or twelve hundred are thrown out of training as not likely to anſwer the trouble and expence. Hence it is eaſily conceived that the prices frequently given for untried colts, though of faſhionable blood, is much more, upon the average, than their real value. But however, it may happen that ſome buyers have ſo great a knowledge of true ſymmetry, that by examining a colt over, and perhaps juſt ſeeing him canter, can gueſs pretty near whether he has,

or not, the proper points of power neceſſary to conſtitute a racer.—I own it is not in my power.

Let us now take notice of ſome of the different methods practiſed by breeders, viz. Some are partial to particular blood, from no other reaſon than that of fancy; and even do fancy that almoſt every mare of that particular blood will breed a racer; without paying any regard either to ſize, ſymmetry or goodneſs. Others that have large ſtuds, have commonly mares of various ſorts, few or none of which perhaps were ever in training; and probably if they all had been trained, not one

one in ten of them would have been in the form of a ſecond rater! It is very common with ſome of them to reaſon thus.——Such a mare to ſuch a horſe becauſe he has got racers———ſuch a mare to ſuch a horſe becauſe he is ſtrong and boney, and the mare ſmall, therefore the croſs may nick.——— Some put mares that are ſpeedy, though perhaps very ſoft, to horſes that are ſlow and ſtout, thinking that method may nick.——Some through partiality will put moſt of their mares to the ſame ſtallion, fancying he may get a racer upon any mare of the bred ſort.——Some young breeders will be at the expence

pence of putting a half-bred mare to a capital ſtallion, whence conſequently they expect to breed a racer. Theſe and many other ſuch methods are common in the general practice. But however, I well know there are ſome experienced breeders that practice very different methods to the abovementioned; yet as none of theſe gentlemen have ever been at the trouble of giving the publick their ſentiments on this ſubject, their knowledge remains a ſecret to us at preſent.

Whoever, ſir, is concerned in breeding of horſes, either for racing

or

or any other purpoſe, ſhould, in my opinion, be very curious in their choice, both of the male and female; for from the many obſervations that have been made upon various ſpecies of animals, it is found) at leaſt by all thoſe who have given themſelves the trouble of obſerving) that there is one fundamental maxim which will always hold good (allowing for the little variations of nature) viz. that Properties deſcend! Therefore it is reaſonable to expect that in the breeding of animals in general, the offspring, for the moſt part, will bear a near reſemblance (when at maturity

maturity and perfect in the animal ſyſtem) in ſize, colour, ſymmetry, &c. to either the male or female; but more commonly an equal part (or nearly ſo) of both, from whom it ſprung. Tho' this obſervation is not entirely general, yet one may venture to affirm, that where one horſe, or any other animal bears the greateſt reſemblance of grandſire or grandam, or any other diſtant kindred; there are ten at leaſt, that partake more in likeneſs to their own ſire and dam, both as to ſize, ſymmetry, &c. Hence conſequently to procure theſe good, ought to be the firſt

and

and principal care; and to be likewiſe partial to the merits of their anceſtors through as many generations as poſſible! Therefore to breed for racing (in which reſpect I ſhall not pay altogether that regard to beauty as in breeding for other purpoſes, becauſe power is the more neceſſary qualification; though where both power, good paces, and beauty are united, is moſt pleaſing,) one would firſt procure, if poſſible, ſuch mares as are prov'd capable of coping with, or nearly as good, as a firſt-rate horſe; their pedigrees to be eſteem'd good likewiſe. Theſe one would carefully

examine in every part and point, relative to ſpeed, and power for perſeverance; in order to diſcover their defects in ſymmetry and true proportion. The ſame obſervations ought likewiſe to be made upon the moſt noted ſtallions; alſo of their pedigrees and performances: for though this kingdom affords many very good ones, yet none of them are in all reſpects compleat. One would next uſe the utmoſt caution in fixing upon the proper ſtallions, by being very careful to avoid giving a mare to ſuch horſe who one finds to be defective, in any degree, in the ſame points wherein the

mare

mare may be defective; but rather chuſe that he ſhould be very compleat in thoſe particular points: (avoiding alſo theſe two things as much as poſſible and convenient, viz. affinity in blood, but particularly inceſt—and all hereditary defects.) Theſe obſervations being quite different to the general practice, they may probably appear at firſt view to be inconſiſtent! however, before I conclude, I hope to convince you of their being not only reaſonable, but conſiſtent with the laws of nature; and in the courſe of ſuch further remarks as may occaſionally occur, I ſhall endeavour to prove them ſo.

In regard to ſize one would alſo be a little partial; and the medium, which is always the moſt deſireable, may be fixt at about 14 hands 3 inches and half: not as breeding ſhould be confined to this particular ſize, either in horſe or mare, but by making that the medium, one would naturally from thence infer, that if a mare of 14 hands two inches only, was in the form beforementioned, and to be bred from, one ſhould chuſe a horſe of 15 hands at leaſt, but rather 15 hands and an inch; and in either, ſtrictly to conſider what is beforementioned, in regard to defective

points.

points. When two mares are nearly of an equal goodneſs, at nine ſtone each for four miles, one of them 14 hands 2 inches, and the other 15 hands 2 inches; conſequently the leſſer ſize muſt be of a much better ſymmetry than the greater! But however it ſeldom happens that there is a ſufficient power in the ſmaller ſize to conſtitute a firſt rater; tho' when this does happen, one would prefer the ſmaller ſize, (to breed from) ſuppoſing not under 14 hands 2 inches, before the greater.

If the above method was even

put

put in practice, it would be a little abſurd to imagine the beſt horſes of the time would always be produced by it: becauſe there may be ſome breeders who perhaps have methods of their own that may come nearer to a certainty. And beſides this there may be many mares (amongſt the great number) which never were in training; that, had they been trained, would have appeared in a capital form; and ſome of theſe may happen upon chance, to be given to ſuch ſtallions as may be moſt proper for them. And I much believe that when good

horſes

horſes happen to ſpring from untried mares, it is oftner owing to chance than to judgment in the breeder!

That method of breeding upon the principles of chance, from untried mares, tho' well bred, muſt undoubtedly be in a very high degree uncertain! but change the principle and let ſymmetry be the guide——then indeed the breeder, if he well underſtands ſymmetry, may ſometimes truſt to his own judgment and perhaps be ſucceſsful.——The knowledge of a compleat ſymmetry, requiſite to conſtitute

a capital race-horſe, is much more wanted than is generally imagined; and it is a notorious fact that almoſt every man pretends to it; each fancying himſelf ſufficiently verſed therein. But as conceitedneſs is a certain enemy to improvement, ſo a fancy'd knowledge is to a real one; becauſe it prevents and overcomes a diligence always requiſite in ſearches after truths! But to return.——Suppoſe we were to take ten mares, all capital racers, and fifty mares untried, on the proſpect of their blood only, to a ſtud for breeding: the ten mares to be ſtinted according to the plan be-

beforementioned; and the fifty to be ſtinted upon the uſual principles of chance.--I think one might reaſonably expect that the ten mares would produce more firſt-raters than the fifty!—— Allowing the ſuppoſition that their produce all grow to maturity.

We have many inſtances of mares, that have appeared capital upon the turf, producing good racers when they have been properly croſs'd. However, this is not to be look'd upon as a certainty, becauſe there is as many or more chances againſt the certainty than there is for it; even if

we ſet aſide accidents. A foal may be weak when foaled, and perhaps may be of a weakly conſtitution; (which is ſometimes owing to the dam being ſtarved, or badly kept, during her infoal,) or the foal may happen to be rear'd upon wet, or clayey land, both which are bad for winter; or kept on land that has bad herbage: or upon very high ground, where fogs are frequent, and the wet remains too long on the graſs: any of theſe may prevent the offspring growing to the natural ſize, or regular ſhape, therefore may have a bad effect, becauſe a very little difference in ſymmetry may make a great difference

rence in power. Beſides, if all the care was taken that could be thought on, an uncertainty ſtill remains; as even then, the offspring may not grow to the expected ſize, I mean the medium between ſire and dam, and may alſo be inferior in ſymmetry to either of them. But on the other hand, there is a probability, not only of being equal to the medium in every reſpect, but of being ſuperior both in ſize and ſymmetry too; and when the latter happens, one may deem it an agreeable improvement in the breed.

I own that ſome untried mares have produced good racers not only from one ſtallion, but from ſeveral. Here it is not conſidered that there are but few ſtallions intended for bred mares, except they have appeared in a capital form as racers. And ſome of theſe, though kept for a ſtallion many years, perhaps never had five mares that were within a diſtance of a capital racer; therefore for want of good Mares the horſe gains no eſteem; becauſe by having bad mares only, the produce will undoubtedly appear in a very low form as racers: from thence, the horſe is damned

damned as a bad ſtallion. This has been the caſe of many, and will be of many more. So that the great chance, of even a good ſtallion, depends upon his having good mares at firſt. The little Hartley mare, it's true, produced capital racers from ſeveral ſtallions! whence no doubt ſhe was, if ſhe had been trained, a capital racing mare. Vane's Little Partner mare, no doubt, would have done the ſame, if ſhe had been properly managed. She indeed produced a bad horſe Stump, but he was got by a very bad ſtallion. She afterwards had Bandy by Cade, and though he had a crooked leg, was the beſt of Cade's get;

get; therefore it is probable ſhe was the beſt mare Cade ever had.

It is allowed by men of the greateſt judgment, that the Engliſh breed of horſes have been at various times improved by breeding from foreign horſes; and of theſe the Arabian is deemed the beſt. However, we muſt allow that improvements have ſprung from both Turk and Barb. I am quite of opinion that not only the moſt beautiful, but the moſt powerful horſes for racing of their ſize in the whole world, are bred in Arabia; and this I will endeavour to explain before I conclude.

We

We will now enquire into the reaſons of the improvements made by croſſing into foreign blood. Hence let us ſuppoſe that there were not in England, before racing became in vogue, either horſes or mares, within two diſtances of thoſe we now call firſt-raters; for inſtance, Regulus. Now ſuppoſe one was to breed from ſuch mares as thoſe juſt mentioned, and a foreign horſe of an equal goodneſs to Regulus? what form, as race, can their offspring be expected to appear in? Experience tells us that ſome of them may be only a very little better than the dam; ſome perhaps

haps half a diſtance better; ſome a diſtance, (which is the medium) and ſome a little more improv'd. This improvement can ariſe only from a more exquiſite ſymmetry in the ſtallion! whence conſequently will proceed a ſuperiority in power. Suppoſe again, the ſame Mares were to breed from another horſe (either Engliſh or foreign it matters not whether) that was of the ſame goodneſs as themſelves, what improvement then can be expected? I anſwer, none at all! Yet, it may happen, that ſome of this breed may be ſuperior, in a ſmall degree, and alſo ſome of them inferior, to either ſire

or

or dam. But it muſt be very abſurd to imagine that the offspring might be a diſtance or more better than either ſire or dam, or any of their anceſtors; becauſe it is not in the common courſe of nature, therefore will ſeldom happen :—It never did to my knowledge. What then can improvements proceed from? certainly from a ſuperior ſymmetry either in ſire, or dam! and if not from the dam, it muſt be from the ſire!

Moſt I have converſed with on the breeding ſubject, ſeem quite poſitive that the offspring partakes

more in general of the dam, than of the ſire; and many arguments they uſe to ſupport their aſſertion, of which the following ſeems moſt plauſible. 'Is not, ſay they, the 'offspring bred in the womb of 'the female? and during the time 'ſhe is with young, is not the fætus 'nouriſhed entirely by her? as 'alſo for the moſt part after it 'comes into the world? therefore 'by partaking all this time of her 'nature and properties, it cannot 'poſſibly be otherwiſe.' This opinion being pretty prevalent, I dare ſay, ſir, you'll agree with me in thinking it neceſſary to make

make an enquiry into the conſiſtency, or inconſiſtency of it.---It ſeems in my opinion to be very abſurd, and not conſiſtent with the laws of nature! and as thoſe laws ought to be the guide, we will make a few obſervations thereon; therefore I will beg leave to make one or two upon the inanimate creation, as probably you may find it not quite foreign to this argument. Was the ſeed of each kind of grain that is ſown in the earth, to partake of the nature of earth only, each ſpecies of grain would have been earth long ago! 'But to every ſeed is given

'its own body, otherwiſe chance 'might have produced ſome other 'grain.' Firſt cauſes are ſeldom juſtly accounted for, but ſecondary ones are often juſtly accounted for from their invariable appearance.——If it be aſked why a ſeed ſown in the earth ſhould itſelf die and intermix with earth; and why numbers ſhould ſpring from it? experience tells us, that tho' the ſeed ſown in the earth ſoon decays and becomes earth; yet, when it has a product, it hath firſt performed its proper office; for by the aſſiſtance of moiſture, it hath put forth the bud, which bud derives

rives its exiſtence from a particular part of the grain called the germ, or eſſential part: the remaining part of the grain ſupplies the blade with nouriſhment for a ſhort time, until it is able to draw its nouriſhment alone from the earth: but altho' at the period of the grain the young blade is in poſſeſſion of this ability, yet it cannot gain a ſufficient nouriſhment, without the aſſiſtance of the ſun, the rain, and the ſalts of the earth: the firſt to attract by its heat, the ſecond to aſſiſt in opening the pores of the ſoil, and both to aſſiſt the latter in compoſing for it a proper texture,

whereby

whereby the young plant may, by its attractive quality, readily find ſuch particles (perhaps partly ſimilar to, and partly modified by its own nature) as are requiſite aſſiſtants from its infancy down to maturity. Here we find it quite plain that the earth has nothing more to do with the ſeed ſown therein, than to give aſſiſtance, as a nurſe, to bring it to maturity. The animal creation is partly ſimilar; as it is, in my opinion, very reaſonable to aſſert that the dam is nothing more than a nurſe and aſſiſtant, after the act of copulation is over.——But it is aſſerted by many, who profeſs natural

tural philoſophy, that the animate and inanimate creation both conſiſt of male and female alike, and that the female in the latter cannot continue its ſpecies without the aſſiſtance of the male.

This they lay down ſo plauſibly and ſo philoſophically (as they themſelves term it) that it has almoſt gained a general, one might have ſaid, univerſal approbation: However it has not gained mine; neither will it till better reaſons are given than I have hitherto met with. Our own obſervations, of which we may make many every day, aſſiſted by

by the Moſaic account of the creation, are ſufficient clearly to convince any one that theſe philoſophers are not right in this aſſertion. Moſes gives the following account Gen. chap. i. v. 11 and 12, viz. 'And God ſaid, let the earth bring 'forth graſs, the herb yielding 'ſeed, and the fruit-tree yielding 'fruit after his kind, whoſe ſeed 'is in itſelf, upon the earth: and 'it was ſo. And the earth brought 'forth graſs, and herb yielding ſeed 'after his kind, and the tree yielding fruit, whoſe ſeed was in itſelf, after his kind: And God ſaw 'that it was good'. Here we find

by

by that expreſſion, "Whoſe ſeed is in itſelf after his kind" —— that in the inanimate creation there is no neceſſity for a male! conſequently then there is no female! Thoſe the philoſophers call male plants, happen to be the ſterile ones; and thoſe they call females, are the fecund ones; —— Thoſe plants that are fruitful, where it happens no ſterile one is amongſt them, they, to make good their aſſertions, call hermaphrodites! Strange compariſon indeed! but what does it amount to? nothing at all.

To return —— And at the formation of animals in general, we find

in the ſame Chapter, that they were alſo created in kind, with the additional appellations of male and female: after which God bleſſed them, and ſaid "be fruitful and multiply, "and repleniſh the earth." Nature then obey'd, and will continue ſo to do to the end of time, without addition or diminution of ſpecies. As to thoſe animals which are propagated between two different ſpecies, they are not ſuffered to increaſe, therefore are not a ſpecies of animals, but monſters. However, we find in theſe, this uſeful obſervation, viz. that they partake nearly of an equal part of the properties of both the male and female from whom they ſprung; and

and it is certainly the ſame with all animals whatever.

Hence we find, it is an undeniable fact that each exiſting ſpecies, in the whole univerſe, is a product by ſome means derived from one, if in the inanimate creation: or two, if in the animal creation, of its own ſpecies! Therefore as it is ſelf-evident that each exiſting ſpecies, is a product from its own ſpecies, then conſequently the product of all animals, will be of the ſame ſpecies with its progenitors. And therefore it muſt be further evident, that the offspring of all animals, partake of a part of

the fire and a part of the dam from whom it ſprung. For, if providence had intended it as a general rule that the offspring ſhould partake more of the female than the male, then certainly no ſpecies could have continued its exiſtence, becauſe in length of time they would have degenerated into the loweſt degree of effeminacy. Sometimes indeed it does happen that the offspring, though a male, partakes moſt in likeneſs to the dam; yet we find that others, in turn, partake moſt in likeneſs and ſymmetry to the fire: hence it is, that the laws of nature ſtill remain in their unalterable courſe.——Though the

womb

womb of the female is the only receptacle for the ſeed of male and female united to produce more of the ſame ſpecies ; yet, after the act of copulation is over, the generated thing moſt certainly partakes no more of the nature of the female, than of the male! — Would it not be thought very abſurd, when a new born child is put to a wet nurſe, to ſay it would contract a likeneſs?——The child may indeed contract diſorders if the nurſe has any, but not a likeneſs. The fœtus in the womb moſt certainly receives its whole nouriſhment from the female, and conſequently may be liable

ble thereby to contract diſorders, and that only.

Theſe obſervations ſufficiently prove, that every one who fancy the offspring partakes more of the nature of the female than the male, are under a falſe notion, and are certainly miſtaken in their opinion. —— Theſe obſervations were alſo meant to corroborate ſeveral others made in the former part of this letter. And they alſo furthur prove, that the moſt probable expectation in breeding of horſes for all purpoſes, and other animals, is, that the offspring will partake

take nearly of an equal part of ſire and dam; provided it is perfect in the animal ſyſtem! and it ſeldom happens otherways.

It has been obſerved in the former part of this epiſtle, that it is highly neceſſary, for thoſe who attempt to breed racers, to be very curious in the choice of both horſe and mare; in which reſpect they certainly cannot be too ſtrict. I would now deſire, Sir, to refer you back to thoſe particular obſervations; but as I imagine you would rather chuſe to go ſtrait forward, I will recite them here; there-

therefore this tautology, I know you'll excuſe.

Whoever, Sir, is concerned in the breeding of horſes either for racing or any other purpoſe, ſhould in my opinion, be very curious in their choice, both of the male and female; for from the many obſervations that have been made upon various ſpecies of animals, it is found (at leaſt by all thoſe who have given themſelves the trouble of obſerving) that there is one fundamental maxim which will always hold good (allowing for the little variation of nature,) viz. that PROPERTIES DESCEND.

There-

Therefore it is reaſonable to expect that in the breeding of animals in general, the offspring for the moſt part, will bear a near reſemblance (when at maturity and perfect in the animal ſyſtem) in ſize, colour, ſymmetry, &c. to either the male or female; but more commonly an equal part (or nearly ſo) of both, from whom it ſprung. Tho' this obſervation is not entirely general, yet one may venture to affirm, that where one horſe, or any other animal bears the greateſt reſemblance of grandſire or grandam, or any other diſtant kindred; there are ten

at leaſt, that partake more in likeneſs to their own ſire and dam, both as to ſize, ſymmetry, &c. Hence conſequently to procure theſe good, ought to be the firſt and principal care; and to be likewiſe partial to the merits of their anceſtors through as many generations as poſſible! Therefore to breed for racing (in which reſpect I ſhall not pay altogether that regard to beauty as in breeding for other purpoſes, becauſe power is the more neceſſary qualification: though where both power, good paces, and beauty are united, is moſt pleaſing,) one would firſt procure, if poſſible, ſuch mares as

are prov'd capable of copying with, or nearly as good, as a firſt-rate-horſe; their pedigrees to be eſteem'd good likewiſe. Theſe one would carefully examine in every part and point relative to ſpeed, and power for perſeverance, in order to diſcover their defects in ſymmetry and true proportion. The ſame obſervations ought likewiſe to be made upon the moſt noted ſtallions; alſo of their pedigrees and performances: for though this kingdom affords many very good ones, yet none of them are in all reſpects compleat. One would next uſe the utmoſt caution in fixing

upon the proper ſtallions, by being very careful to avoid giving a mare to ſuch horſe who one finds to be defective, in any degee, in the ſame points wherein the mare may be defective; but rather chuſe that he ſhould be very compleat in thoſe particular points: avoiding alſo theſe two things as much as poſſible and convenient, viz. affinity in blood, but particularly inceſt,—and all hereditary defects.

Was theſe rules ſtrictly adhered to, they would, in all probability, be often productive of very pleaſing conſequences; as it is likely that

that the progeny will more frequently appear above the medium (I mean between ſire and dam) than under it. But as we have before obſerved, that no certainty in this reſpect can be attained, it was proper to get as near to a certainty, as we poſſibly could: here I muſt acknowledge, that theſe rules, with ſuch other hints as are given in the foregoing part of this letter, are the beſt that my underſtanding can ſuggeſt: and I beg leave to ſay again, that were they ſtrictly practiſed, "Nicking in the croſs." (a term the breeders make uſe of ſuppoſing it chance) would very often be the con-

conſequence: therefore by degrees, breeding may be brought much nearer to the top of perfection than it is in this part of the world at preſent. I now hope, Sir, you are quite ſatisfied with ſuch arguments as have been here advanced: it has been my principal aim to enter upon ſuch only, as were conſiſtent with the unerring law of nature; and upon this principle I have endeavoured to explain them.

One might yet enter into ſome further obſervations in regard to improvements, but having already gone to a much greater length than

was

was at firſt intended, ſhall therefore omit it. More remarks might alſo be made upon abſurdities in the general practice; one of which I will juſt mention becauſe it is common. It is this,—when a jockey or breeder is to give his opinion on a brood mare, his firſt and principal obſervation is, whether or not ſhe is roomy, (as they term it) and if ſhe happens in their opinion to have a large carcaſs, ſhe is then deemed a brave roomy mare and likely to breed a racer. So that ſymmetry, goodneſs, and all other reaſonable obſervations are not once thought on. But as I have, I hope, made it plainly

appear

appear that every female, which is perfect in the animal ſyſtem, is capable, by proper management, of producing its own likeneſs;—I ſhall argue no farther on this or any other point of abſurdity.

I will now give you, Sir, a few ſcattered thoughts in regard to foreign horſes; in which I will be as conciſe as poſſible. And will afterwards trouble you with a few hints in regard to breeding of horſes for common purpoſes, and then conclude.

In regard then to foreign horſes,

horſes, we have before obſerved that the Engliſh breeds of racers have been much improved by croſſing with them; and this not only from the Arabian, but from both Barb and Turk, and ſome ſay the Perſian alſo; therefore we may thence infer that there are ſome horſes in thoſe countries of a better ſymmetry for racing, than can yet be boaſted of in England. The queſtion then is——how! are the beſt horſes in any of theſe countries to be procur'd? Or, what is ſtill more difficult, how can we know, with any degree of certainty, which part of each country the beſt ſorts are bred in? Horſes of indifferent ſorts

may indeed be eaſily procured: what then?—we find by much experience that numbers have been imported, which have not only deceived many in their racing ſchemes, but have been hurtful by getting bad ſtock for every purpoſe whatever! Many, nay moſt that have been imported, were procured merely becauſe they had the appellation of Arabian, Barb, Turk, &c.—The buyer probably imagining this ſufficient to recommend the horſe as a ſtallion to get racers. Some breeders are fond too of a foreign horſe for a ſtallion, particularly of the Arabian; but by this fondneſs they ſometimes loſe the valuable pro-

duce

duce (which might by other methods have been had) of their beſt mares, for three or four years, before they diſcover their error. This ſhews that moſt of the purchaſers of foreign horſes, and ſome breeders likewiſe, have not the leaſt thought about ſymmetry, or action. But however, we may be certain, that, let the appellation of the horſe be whatever may happen, if he is not poſſeſſed of both ſymmetry and action proper for the purpoſe of racing, even in an eminent degree, we ſhall find ourſelves much deceived if we expect to make any improvements by ſuch croſſes.

Arabia, I believe is generally allowed to be forwarder in the improvements of breeding of horſes than any other part of the world! (probably becauſe they have been longer in that practice) and this we find to be fact, becauſe in all other parts of the world where they are fond of fine horſes, they endeavour to improve their breeds from Arabia. But however, it ought not to be ſuppoſed that good ſorts are bred in every part of Arabia, neither in Barbary, or Turky; tho' there is no doubt but each of thoſe countries contain ſome very capital horſes. Therefore it muſt conſequently be neceſſary to make ſome

enquiry

enquiry into this affair, in order to know which particlar part of Arabia has produced the fineſt and beſt breed of horſes. And likewiſe to make ſome further obſervations on the Turk and Barb. And firſt,

To ſpeak of Barbary, I mean to include all that part of Africa which borders on the Mediterranean from the weſtern ocean to Egypt.

In moſt of theſe ſtates, we are well informed that fine horſes has ever been one of the moſt favourite paſſions of the princes and nobility; conſequently all endeavours have been

been uſed to procure the beſt ſorts that were to be found in all Arabia for ſuch improvements; therefore we may be very certain that there are horſes of excellent ſymmetry in the hands of the Barbary Princes, both for race-ing and riding; the latter we expe-rience daily; and as to the former we are not without many inſtances; namely, the Burton Barb, the Lay-ton, the Taffolet, the St. Victor, the Curwen, the Tholouſe, and many more. Moſt imagine, and which is very propable, that Lord Godol-phin's horſe, tho' called an Arabian, was really a Barb. What confirms this opinion the more is, that en-

quiry

quiry having been made at all the ports belonging to the Turky company in Arabia, in order to have procured more of the ſame breed; but it proved that no ſuch horſe had ever paſſed any of thoſe ports.

The Turks are likewiſe fond of fine horſes, and having connections with all parts of Arabia, even down the red ſea to Mocho, and to Ethiopia, they alſo would undoubtedly procure the beſt ſorts of horſes for improvements in their breed. But I don't find that they are ſo anxious in breeding to that high degree of fine ſymmetry for racing, as the Barbary

bary princes moſtly are: therefore one may conclude, that the beſt Turkiſh horſes are more of the fine hunter than of the fine racer.

The Perſian and Indian princes, nobility, &c. are alſo as fond of fine horſes, as each of thoſe beforementioned; and are at a vaſt expence in procuring them from Arabia. It is from the preſent cuſtoms of procuring horſes for the uſe of the Perſian and Indian princes, &c. that we have an opportunity of ſatisfying our enquiry, as to which part of Arabia horſes of the fineſt ſymmetry are bred in. Undoubtedly the beſt horſes are

bred

bred where they ſell to the dealers at the greateſt prices! eſpecially when there is but little difference between them and thoſe of lower prices, in the expence of carrying to market. We find by thoſe who have had much concern in the horſe trade from Arabia to India and Perſia, that the higheſt priced ones by far, are brought from Arabia-Fælix; and for which there can be no other reaſon given for their overſelling all others, than that they are horſes of a more exquiſite ſymmetry, action, &c. &c. than any other part can produce. Tho' North Arabia lies moſt contiguous for the

ſupply of Perſia and India, yet notwithſtanding this, the princes, nobility and gentry of thoſe countries will have their riding horſes from South Arabia, though the former may be purchaſed in the country where they are bred at a price from thirty to ſixty guineas a horſe, and may be carried from thence to Perſia at a moderate expence: whereas in South Arabia the beſt horſes at three years old are not to be purchaſed for leſs than two hundred, and ſome of them three hundred guineas a piece, where they are bred. Theſe horſes are carried, not only to Perſia and India, but

to

to many other of the eaſtern countries, where they are ſold at a price in proportion to that given in Arabia, which is commonly very great. The connections we have to Bengal, Madraſs, &c. &c. have ſupplied us with good authority, to aſſert, that the horſes brought to thoſe places, from Mocho, in the kingdom of Yemine, and other parts of Arabia Fælix, for ſale, are often ſold for four hundred, and ſome of the fineſt of them for five hundred guineas a horſe. This may ſeem incredible, but I aſſure you, ſir, there are ſeveral gentlemen now in England who will at-

teſt the truth of it. And I am further informed, from authority which I can credit, that ſome of the breeders in Yermine, will not ſell one of their favourite ſtallions for a leſs ſum than fifteen hundred guineas. This being the real caſe, it is highly probable that breeding of horſes is brought, either by length of time, or ſuperior judgment in the breeder, or perhaps of both, to a much higher degree in the way to perfection in ſouth Arabia, than in any other part of the world whatever. But notwithſtanding this, we are not to ſuppoſe that every one of their breeds of horſes, are capital

ſorts,

ſorts, nor even that every one of the beſt and choiceſt ſort, can be capital! Therefore when it happens that men of but little judgment in horſes attempt to make a purchaſe there, they are not very likely to chuſe the beſt, nor even to have a ſight of them; becauſe they commonly take the firſt offered. But thoſe who are judges of the ſymmetry requiſite to conſtitute a race-horſe, would uſe very different methods; and would not be ſatisfied untill they had viewed every horſe they could poſſibly be admitted to ſee, in order to diſcover which were moſt likely for their purpoſe.

Were

Were a few well choſe horſes brought from Arabia Fælix to England, I ſhould not in the leaſt doubt but that they would make much improvement in our racing breed, both in ſpeed and perſeverance too.

As to the horſes in north Arabia, I imagine but few of them are worth the trouble of bringing to England; for as I am informed, they do not take care in breeding, and very frequently mix their breeds with Turkiſh horſes to increaſe their bone and ſtrength.

Thoſe

Thoſe horſes which are bred in the deſerts of Arabia, I will not pretend to give any particular account of, becauſe I could never procure any information to rely upon. What I have heard of them is—that they are moſtly horſes of beauty, and good action, and exceeding hardy; but are ſaid to be generally of too ſmall a ſize for racing.

To breed for all common purpoſes, we ſhould act upon the ſame principles as in breeding of racers; only applying thoſe principles to the particulars of one's intended plan. Suppoſe one would endeavour to breed a good hunter? we know

know to a certainty that every mare, and every ſtallion, are not proper for this purpoſe; therefore judgment is required in fixing upon proper mares, alſo in fixing on proper ſtallions for ſuch mares; conſequently the more judgment the breeder has, the more likely he is to ſucceed in his plan. As we are certain that properties deſcend (allowing for variations of nature) we ought to keep our eye on that principle, becauſe it will direct us nearer to a certainty than any other method whatever. Hence we are to conſider all the porperties of the mare we intend to breed hunters from; ſuch as

temper

temper, health, ſtrength, action, ſpeed, perſeverance, and alſo beauty. The ſame obſervations to be made upon the ſtallion in every reſpect; but however, it is almoſt impoſſible to procure either horſes or mares without ſome defects: therefore, as has been before obſerved with reſpect to breeding racers, it is highly neceſſary to take great care that the mare and ſtallion are not both defective in the ſame point, but that each ſhould be very compleat in that particular point wherein the other is in any degree defective, either in regard to beauty, or ſtrength, or any other of the neceſſary properties juſt

mentioned. If the mare one would breed from was poſſeſſed of moſt or all of theſe qualities, I would not be forward in putting her to a high bred ſtallion, except he was very bony, and had likewiſe all the other qualifications requiſite for a capital hunter. If one was to breed from a mare that had no other fault than that of being ſlow, it will then be moſt proper to put her to a high bred horſe, but not without the aforeſaid caution and obſervations. If your mares are proved to have a ſufficient ſhare of ſpeed, the half-bred horſes are to be preferred,—I mean a horſe that has been throroughly proved, and

and has all the deſired qualifications as a hunter,—it being the moſt likely to anſwer the deſired purpoſe in breeding a hunter. Many of the high-bred ſtallions are not properly adapted to hunting in a ſtrong country; however it muſt be allowed, that where there is a fine turf and but few hedges, the bred horſe often excels, particularly when quite maſter of the weight he is to carry. My reaſon for being cautious of putting a capital hunting mare to a full bred ſtallion, is, becauſe I am certain that ſeveral of the ſtallions now in vogue, are not altogether of the proper ſymmetry for hunters, yet I ſhould have

no objection to putting ſome particular bred mares to them, not doubting but the croſs might anſwer for raceing. On the other hand I am likewiſe certain that there are ſome well bred ſtallions, which have all the qualifications requiſite to conſtitute the fine hunter, and are alſo horſes of beauty and fine ſymmetry. Now to breed between a good, boney, ſized, hunting mare, and ſuch a horſe as juſt mentioned, will ſeldom fail in anſwering the expectation of the breeder. Hence I imagine, Sir, you'll allow that it is highly neceſſary, in fixing your mares to the ſtallions, to pay a great attention, not only to the

general

general requiſite qualities, but alſo more particularly to beauty and juſt action; becauſe ſuch ſorts, when to be ſold, will fetch the beſt prices. Beſides, you know there is not any difference in the expence between the breeding and rearing the one and the other.

The ſame principles hold good in breeding for the road alſo. A pleaſing mould, and juſt action ought to be the principal care; and as to ſize, that is to be conſidered according to the purpoſes the breed is intended for; and, let the height you aim to breed be high or low,—bone

and

and ſtrength are very neceſſary requiſites for hard labour, therefore ſhould always be had if poſſible.

To breed for the harneſs, the ſame fundamental principles hold good alſo. For this purpoſe, one would attempt to have as much beauty as poſſible in both horſe and mare; alſo ſize, ſtrength and good action, particularly that of walking and trotting, they being the principal qualities to conſtitute a horſe for this purpoſe.

The North-country breeders——I mean thoſe in Lincolnſhire, Yorkſhire, &c.——are, in my opinion, in

a

a better method of breeding coach horſes than any other breeders in Britain; and I am apt to believe that ſome of them practice as judicious a method as can be thought on, particularly with ſuch mares and ſtallions as their country affords.—Don't imagine, ſir, that I am about to revive an old and abſurd opinion—that horſes could not be bred and reared properly any where in England but in the North; far from it. However, this opinion has formerly prevailed, and has been almoſt a general one. But in proceſs of time, when racing became much in vogue, and when few or no racers were bred

but

but in the North, the price of a tolerable racer became very high:--- the gentlemen of the South being then pretty much tired with the great and exorbitant prices aſked for every thing of the high-bred kind, determined to ſet about breeding racers themſelves; ſo that it was then ſoon brought to a proof, that by conteſting the affair upon Newmarket-heath, it was plainly diſcovered, that horſes might be bred to as much perfection in the South of England, as in the North! The ſame abſurd opinion ſtill highly prevails in regard to breeding horſes in France, and it is ſurely a ridiculous

notion;

notion; for it is as certain that good horſes, for either racing or any other purpoſe, may be bred in France, where there is proper proviſion and proper management, as in any part of England! Aſk any of thoſe who are in this opinion,——why good horſes cannot be bred in France? Their anſwer is ——" no reaſon can be given for it," which is certainly true. The only reaſon that can be given why it has not been done hitherto, is, becauſe they have always purſued wrong methods. Thoſe geniuſſes who are in this opinion, are too near-ſighted to ſee that the moſt capital horſes are bred in much hotter climates than any part of

France, and conſequently not ſo well ſupplyed with proper herbage for promoting the growth of young horſes, as France affords. For inſtance, Barbary, Turky, North Arabia, but more particularly South Arabia; this country being in almoſt the hotteſt part of the globe, yet there is a probability of the beſt horſes for racing in the world being bred there! It is aſſerted indeed by * Doctor Hally, that the orginal fine horſes were bred in Ethiopia; his own words are (ſpeaking of the inland trade of Ethiopia) as follows, viz. " They have horſes of a moſt

* Atlas, Page 191.

ex-

extraordinary kind, for both beauty and ſwiftneſs: and ſome have thought that all the beſt of the Arabian breed of horſes, which are now ſo valuable in the world, were firſt brought from that country." The ſame obſervations are made in Brown's travels; which Mr. Brown found amongſt the papers of a French ſurgeon, who had been taken priſoner in the Red Sea, and was carried into Ethiopia, where he reſided about twenty years, and ſaw moſt parts of that Empire, and died in Egypt, in his way to France, where Mr. Brown met with his papers by accident at the houſe he died. However, we muſt wait for ſome further accounts of Ethiopia,

before

before we can be certain of its producing the original fine horſes.

I am afraid, Sir, you'll think me too prolix on this ſubject, therefore I will proceed no further upon it. As to my ſentiments in regard to the management of a ſtud, young colts, &c. (ſuch as they are) ſhall be at your ſervice whenever you pleaſe, and my time will permit.

I now beg leave to ſubſcribe myſelf, with the greateſt ſincerity,

SIR,

Your moſt obedient,
humble ſervant,

R. WALL.

London, May 10th, 1758.